



Sunday, 2 June 2013

16–19:30..... Registration, Lawrence Welk Room
18–19:30..... Opening Icebreaker, Lawrence Welk Room

Monday, 3 June 2013

► Morning Session: Case Studies - Current State of The Art

Session Chairmen: Henri Houllevigue and Jing Du

8:15..... Welcome & Safety Briefing
8:30–9..... **KEYNOTE: Geophysics and Petrophysics Data Related to Completion Design** *Pierre Collee (Halliburton)*
9–9:20..... **Comparison of Conventional and Multi-Component 3D Seismic for Shale Characterization in the Marcellus Formation of Bradford County, PA** *Lee Bell (GeoKinetics)*
9:20–9:40..... **Understanding the Stimulated Reservoir Volume from Hydraulic Fracturing through Modeling and Validation of Microseismic Response** *Sudipta Sarker (Chevron Energy Technology Company)*
9:40–10..... **Integrating Microseismic, Gamma Ray and Resistivity Logs to Identify Subsurface Faults: Niobrara Shale, Converse County, Wyoming** *John Detring (MicroSeismic Inc.)*
10–10:20..... Coffee Break
10:20–10:40..... **Case Study: Integrating Surface Seismic, Microseismic and Rock Properties in the Haynesville Shale** *Gabino Castillo (Hampson-Russell)*
10:40–11..... **Mapping Reservoir Quality and Completion Quality through Integration of Core-Calibrated Clustered Log Data and Seismic Attributes in Shale Gas Reservoirs** *Dave Paddock (Schlumberger)*
11–11:20..... **Evaluating Effectiveness of Hydraulic Fracturing with Advanced Analysis of Microseismic Events** *Ted Urbancic (ESG Canada Inc.)*
11:20–12..... Discussion
12–13:15..... Lunch, Sternwheeler Room

► Afternoon Session: Seismic Characterization of Unconventional Reservoirs

Session Chairmen: Yongyi Li and Angelika-Maia Wulff

13:15–13:35..... **Advanced Imaging and Inversion for Oil Production Estimates in Unconventional Resource Plays** *Greg Johnson (WesternGeco)*
13:35–13:55..... **The Role of 3D Seismic in Shale Gas and Tight Sand Gas Evaluation in the Cooper Basin, Australia** *David Schmidt (Drill Search Energy Ltd)*

13:55–14:15..... **The Advantages of 3D Seismic in Marcellus Exploration and Development** *Jianli Yang (Seneca Resources)*
14:15–14:35..... Coffee Break
15:35–15:55..... **Reservoir Prediction Using Seismic Frequency Attribute of Shale Gas** *Yongzhen Ji (China University of Petroleum)*
15:55–16:15..... **Application of Advanced Seismic Imaging and AVO Versus Azimuth Simultaneous Inversion for Unconventional Resource Plays** *Paul Miller (Schlumberger)*
16:15–16:35..... **Global Azimuthal Seismic Inversion Using Fourier Coefficients Providing Unambiguity and Detail in Fracture Parameters for Shale Gas Characterization** *Norbert Van de Coevering (Hamson-Russell)*
16:35–17:30..... Discussion

Tuesday, 4 June 2013

► Morning Session: Anisotropy in Various Scales

Session Chairmen: Azra Tutuncu and Jing Du

8:30–8:50..... **Use of Sonic and Seismic Anisotropy to Characterize Resource Shales** *Colin Sayers (Schlumberger)*
8:50–9:10..... **The Use of Borehole Sonic Data for Estimating Polar Anisotropy Parameters in Unconventional Resources: Applications and Limitations** *John Walsh (Schlumberger)*
9:10–9:30..... **Challenges in Shale-reservoir Characterization** *Niranjan Banik (Schlumberger-WesternGeco)*
9:30–9:50..... **Ultrasonic Modeling of a “Microseismics” with Three Component Receivers, from Laboratory to Field** *Evgeny Chesnokov (University of Houston)*
9:50–10:15..... Discussion
10:15–10:35..... Coffee Break

► Poster Session

10:35–11:35..... **Evaluation of Coal-bed Methane in Muara Enim Area, Sumatra Island, Indonesia** *Djedi Widarto (Upstream Technology Center, PT Pertamina)*

The Potential of Basement and Shale Unconventional Hydrocarbon Resources in the Albertine Graben, Uganda; a Preliminary Evaluation of the Potential Constrained from Seismic and Well Data Acquired for Hydrocarbon Exploration *Tonny Sserubiri (Petroleum Exploration and Production Dept Uganda)*

Study of Woodford Shale Oil Flow Simulation *Mohammad Sharifi (University of Tulsa)*

Application of Ensemble Empirical Mode Decomposition the Passive Seismic Signals for Identification of Hydrothermal Dynamics, Case Study: Mt. Lamongan East Java *Tri Martha KP (Institut Teknologi Sepuluh Nopember)*

Unlocking the Mississippian Lime Play – A Geophysical Perspective *Jamie Lambrecht (Shell Exploration & Production)*

11:35–12..... Discussion
12–13:15..... Lunch, Sternwheeler Room

► Afternoon Session: New Technologies for Unconventional Resources

Session Chairmen: Jing Du

13:15–13:45..... **CRP Reflection Imaging Using Microseismic Sources Recorded by Dense Surface Arrays** *Larry Brown (Cornell University)*
13:45–14:15..... **Integration of 2D Seismic with Multiple Geophysical Measurements to Better Understand Structural Complexity in the Marcellus and Utica Shales** *Neil Dyer (ARKeX)*
14:15–14:45..... **Native Permeability Detection, Enhancement, and Management for Non-Conventional Resource** *Peter Malin (University of Auckland)*
14:45–15:05..... Coffee Break
15:05–15:35..... **Using Low Frequency Electromagnetic Technology to Map Hydraulic Fractures in Unconventional Resources** *Jiuping Chen (Schlumberger-EMI Technology Center)*
15:35–16:05..... **Applications of Satellite and Aerial Imagery in Shale Plays** *Bob Brook (Spatial Energy)*
16:05–16:35..... **Continuous Seismic Time Lapse at the Water Resources at Al Wasee Water Pumping Field in Saudi Arabia Using Seismic ACROSS Source for EOR and CCS Application** *Junzo Kasahara (Tokyo University of Marine3 Science and Technology)*
16:35–17:05..... **Imaging the Eagle Ford at 140 Hz with Acoustic Zoom-a Novel Diffusion Accentuating Beam Steering Methodology** *Jacques Yves Guigne (Acoustic Zoom Inc)*
17:05–17:35..... Discussion

Wednesday, 5 June 2013

► Morning Session: Advancements in Microseismic and Geomechanical Monitoring Toward Environmental Sustainability

Session Chairmen: Azra Tutuncu and Henri Houllevigue

8:30–9..... **KEYNOTE: Geomechanical and Environmental Challenges in Hydraulic Fracturing of Unconventional Resources** *Azra Tutuncu (Colorado School of Mines)*
9–9:20..... **Uncertainty in Surface Microseismic Monitoring** *Mike Mueller (MicroSeismic Inc.)*
9:20–9:40..... **Virtual Receivers to Aid in Microseismic Event Locations** *Frank Horowitz (Cornell University)*
9:40–10..... **Laboratory Hydraulic Fracture Characterization Using Acoustic Emission** *Jesse Hampton (Halliburton)*
10–10:20..... Coffee Break
10:20–10:40..... **Comparison of Fracture Failure Planes in the Marcellus and Utica Shales** *Mary Ellison (MicroSeismic Inc.)*
10:40–11..... **Cordova Microseismic and Integrated Interpretation** *Brad Dyck (Penn West Exploration)*
11–11:20..... **Critical Geomechanics in Unconventional Developments: Understanding Microseismicity and Determining Key Drivers** *Neal Nagel (Itasca Houston)*
11:20–12..... Discussion
12–13:15..... Lunch on own

► Afternoon Session: Role of G&G in New Plays

Session Chairmen: Henri Houllevigue and Yongyi Li

13:15–13:35..... **QI Support for the Exploration of Unconventional Resources in Oman** *Angelika-Maria Wulff (Petroleum Development Oman)*
13:35–13:55..... **Total Organic Carbon (TOC) Zonation within Sequence Stratigraphy (Eocene), Niger Delta** *Benson Akinbode Olisa (The Federal University of Technology)*
13:55–14:15..... **The Role of Geo-Scientist in the Development of Underground Water Resources** *Joseph Olakuhle Coker (Lagos State Polytechnic)*
14:15–14:35..... Coffee Break
14:35–17..... Discussion
19–21..... Dinner, Lawrence Welk Room

Thursday, 6 June 2013

5:30–17:30..... **Marcellus Shale Field Trip** *Mike Arthur and Azra Tutuncu*

Portions of the Workshop sponsored by:



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